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Patent Claims

1. A method for operating the drive train of a motor vehicle which has

- an engine (11),
- a transmission (15) and
- a friction clutch (17) arranged between the engine (11) and transmission (15),

a control device (16) monitoring a state of the friction clutch (17) and reducing an output torque of the engine (11) on the basis of a monitoring result, characterized

in that the control device (12),

- with the friction clutch (17) slipping, determines an energy quantity dissipated in the friction clutch (17) and/or a temperature of the friction clutch (17),
- compares the engine quantity and/or the temperature with limit values, and
- reduces the output torque of the engine (11) in the event of the overshooting of one or of both limit values.

2. A method for operating the drive train of a motor vehicle which has

- an engine (11),
- a transmission (15) and
- a friction clutch (17) arranged between the engine (11) and transmission (15),

a control device (16) monitoring a state of the friction clutch (17) and reducing an output torque of the engine (11) to a torque desired value on the basis

of a monitoring result, and the torque desired value being determined by a reduction value being subtracted from a current torque of the engine (11),
characterized
in that, after the reduction in the output torque of the engine (11) has taken place, the state of the friction clutch (17) continues to be monitored, and the torque desired value is reduced once again by a reduction value on the basis of the monitoring result.

3. The method as claimed in claim 1, characterized in that

- the control device (16) determines a torque desired value by subtracting a reduction value from a current torque of the engine (11),
- the torque desired value is set on the engine (11), and,
- after the reduction in the output torque of the engine (11) has taken place, the state of the friction clutch (17) continues to be monitored, and
- the torque desired value is reduced once again by a reduction value on the basis of the monitoring result.

4. The method as claimed in one of claims 1 to 3, characterized in that said limit values are dependent on

- operating variables of the motor vehicle and/or
- instructions of a vehicle driver and/or
- environmental variables.

5. The method as claimed in claim 4, characterized in that said limit values

- are dependent on an actuation of a brake by the vehicle driver and

- are lower when the brake is actuated than when the brake is not actuated.

6. The method as claimed in claim 4 or 5, characterized in that said limit values

- are dependent on a degree of actuation of a power control member (13) and
- rise with a rising degree of actuation.

7. The method as claimed in one of claims 1 to 6, characterized in that a number of overshoots of said limit values is determined and is stored in the control device (16).

8. The method as claimed in one of claims 1 to 7, characterized in that

- the engine (11) is designed as an internal combustion engine,
- the engine (11) has an overrun fuel cutoff which is activated when a desired value for the output torque of the engine (11) is lower than an overrun fuel cutoff torque, and,
- in the event of a reduction in the output torque of the engine (11), the torque desired value is always higher than said overrun fuel cutoff torque.

9. The method as claimed in one of claims 1 to 8, characterized in that

- the control device (16) determines at least one further torque desired value,
- the minimum of the torque desired values is determined, and
- the determined minimum is set on the engine (11).

10. The method as claimed in one of claims 1 to 9, characterized in that, as soon as the slip of the friction clutch (17) is lowered, the torque desired value is increased in steps.

11. The method as claimed in one of claims 1 to 10, characterized in that

- the friction clutch (17) is designed as an automated friction clutch, and,
- during a starting operation, the friction clutch (17) is closed simultaneously with a reduction in the output torque of the engine (11).